Introduction to a Seed
1st & 2nd grade

Students develop seed identification knowledge and identify the parts of seeds and what they need to grow. Students examine many different types of seeds and make guesses about what plant they come from.

20-30 minutes

Lesson Objectives:

- Students name the three parts of a seed and describe their function
- Students identify seeds of at least 4 plants
- Students correctly sow seeds in flats or ground

What You Need

- Small Containers with different seeds in each
- Plants that are produced from the seeds (optional)
- Soaked beans
- Flip chart or paper and clipboard to draw seed diagram
- Paper and pencils for each student (optional)
- Seed planting supplies for field or greenhouse

What To Do

Display the plants that come from seeds or write the names of all the seeds on a white board or paper. Explain that the seeds that produce each of these plants are in the containers here. Your job will be to work with a partner and/or on your own and guess which seed you have. Pass out seed containers and give students a few minutes to discuss. Then ask who thinks they have the _____ seeds? Go through the whole list of seeds making sure to gently correct students if they guess wrong.

Then ask “what is a seed?” Explain that a seed consists of 3 parts: a coat (for protection), a plant embryo (baby plant) and food for the embryo to use to grow until it can emerge from the soil and begin to make food for itself from the sun! You may want to draw the bean seed and label the parts. Pass out soaked bean seeds and let them split them open and see the beginning of the root and leaves, have them peel off the seed coat. You may want to have students draw what they see and label the parts as well.
Explain that the size of the seed helps the farmer know how deep in can be planted, the bigger the seed, the more food it has and so it can survive longer underground before it needs the sun, therefore these seeds can be planted deeper. Ask which of their seeds can be planted deep and which should be planted shallow? Then ask about what things plants need to grow (sun, nutrients, water, space, love) see if students can guess these things and how farmers are able to provide all these things for the plants.

Now, with help from parents or volunteers divide into partners and set out to plant seeds in the garden or greenhouse

**Sowing seeds** - Remind students that seeds are valuable and special and therefore we do not want to waste them. Planting too many seeds in one place results in poor plant health because of competition (if you have an example of this it is very helpful).

**Planting in Trays**: Fill the trays with potting soil. Have students make a small depression in the soil with their finger, place two seeds there and lightly cover with soil, water, label, and send it LOVE! Clearly label trays with popsicle sticks-class, date, vegetable name.

**Planting in the field**: Make furrows ahead of time to help students stay in straight lines when planting. Have one pair start at one end and another at the other end and work towards each other to meet in the middle, and another pair can start in a different row. Use hands or fingers to measure spacing between plants. One student can measure and the other places the seed, then switch. Do not cover the furrow until the entire bed is planted, this will help students see what has and has not been planted. Once all the rows in the bed are planted cover the seeds with a rake or by hand.